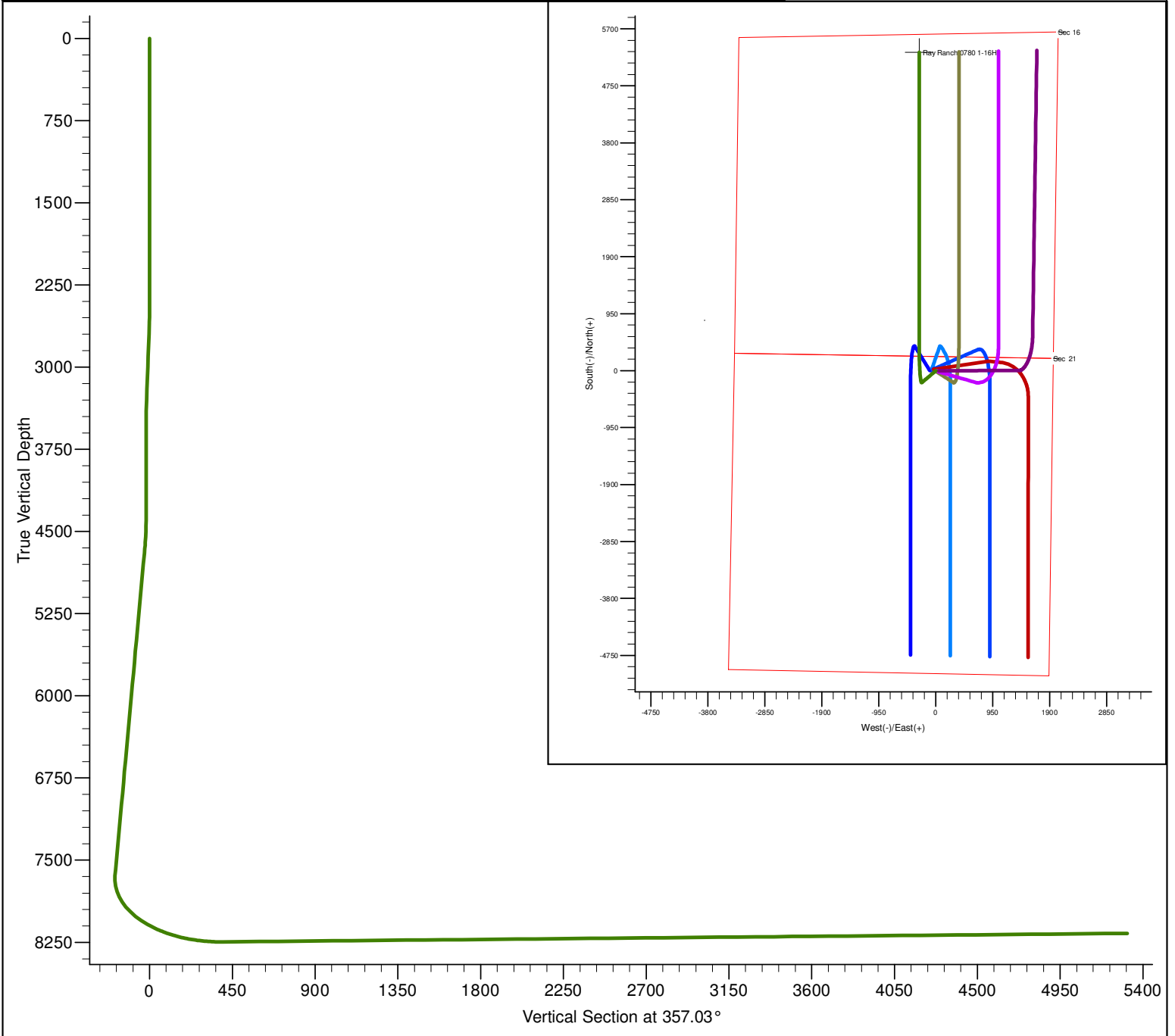


PROJECT DETAILS: North Park Basin										<div><div><div><div></div><div>G</div></div><div><div></div><div>T</div></div><div><div></div><div>M</div></div></div><div><div></div></div></div> <div><div>Azimuths to Grid North</div><div>True North: 0.57°</div><div>Magnetic North: 10.44°</div><div>Magnetic Field</div><div>Strength: 53183.8snT</div><div>Dip Angle: 66.97°</div><div>Date: 12/31/2009</div><div>Model: IGRF200510</div></div>			
Geodetic System: US State Plane 1983 Datum: North American Datum 1983 Ellipsoid: GRS 1980 Zone: Colorado Northern Zone  System Datum: Mean Sea Level													
FORMATION TOP DETAILS												CASING DETAILS	
TVDPPath		MDPath		Formation		DipAngle		DipDir		No casing data is available			
6501.0		6509.2		Shannon		0.00							
7858.0		7874.6		Niobrara		0.00							
DESIGN DETAILS: Design #1												Project: North Park Basin Site: T7N-R80W-S21 Well: Ray Ranch 0780 1-16H Wellbore: Wellbore #1 Design: Design #1	
0' Vertical Section coordinates													
Type	Target	Azimuth	Origin	Type	N/S	E/W	From	TVD					
Target		357.03	Slot		0.0	0.0		0.0					



SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	2500.0	0.00	0.00	2500.0	0.0	0.0	0.00	0.00	0.0		
3	2588.9	1.78	225.00	2588.9	-1.0	-1.0	2.00	225.00	-0.9		
4	3411.5	1.78	225.00	3411.1	-19.0	-19.0	0.00	0.00	-18.0		
5	3500.4	0.00	0.00	3500.0	-20.0	-20.0	2.00	180.00	-18.9		
6	4400.4	0.00	0.00	4400.0	-20.0	-20.0	0.00	0.00	-18.9		
7	4656.4	5.12	229.80	4655.6	-27.4	-28.7	2.00	229.80	-25.9		
8	7653.7	5.12	229.80	7641.0	-200.0	-233.0	0.00	0.00	-187.7		
9	8595.7	90.90	360.00	8245.4	381.0	-275.0	10.00	130.02	394.7	Ray Ranch 1-21H Target	
10	13522.6	90.90	360.00	8168.0	5307.3	-275.2	0.00	0.00	5314.4	Ray Ranch 1-21H Target	